

Distal Biceps Repair Protocol



- This document outlines rehabilitation goals, precautions and exercises following distal biceps repair surgery.
- Rehabilitation phases are listed as time blocks, but progression will be guided by your surgeon and physiotherapist.

Post- Operation recovery	Active Assisted Range of Motion	Active Range of Motion & Early Strength	Return to Activity & Light Strength	Advanced Strength & Return to Sport	
Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	
• week 1 - 2	• week 3 - 6	• week 7 - 12	• Months 3 - 6	• Months 7+	_

Disclaimer:

This leaflet provides some exercises to assist with rehabilitation of your injury. While it contains the recommended exercises, it does not contain all the available exercises or information and does not take the place of talking to your orthopaedic surgeon or physiotherapist.

All exercises have risks and benefits. Your surgeon has weighed the risks of you undertaking these exercises against the expected benefits. If you have any concerns about any of these exercises, ask your surgeon or physiotherapist.

Do not continue the exercises if:

You experience increasing pain (some discomfort is common)

Your condition has deteriorated in any way since you last consulted your surgeon or physiotherapist

You have a new injury or condition and have not consulted your treating doctor about continuing these exercises.

These exercises should only be undertaken by patients who are currently being treated by an orthopaedic surgeon at The Royal Melbourne Hospital.

If you do not understand how to perform an exercise then do not do it. Do not do more than the prescribed number of each exercise without first talking to your orthopaedic surgeon or physiotherapist.

Patients should be aware that the suggested exercises are not guaranteed to provide any improvement in your condition but may assist rehabilitation if undertaken in accordance with these instructions and your orthopaedic surgeon or physiotherapist's advice. Exercises are undertaken at your risk.

Keep this brochure as you may need to read it again.



Phase 1: Immediate Postoperative Period (week 1 and 2)

Goals

- Protect the tendon repair
- Control pain and swelling
- Maintain range of motion at the shoulder, wrist and elbow

Sling (6 weeks)

- Wear your sling at all times for 6 weeks
- You may remove it for hygiene (e.g. shower) and exercises

Lifting / Weight Bearing

 No lifting or weight bearing (leaning or pushing) through the arm

Management / Precautions

- Your outer bandage should be removed and replaced with a compression bandage when you leave hospital. Leave the dressing on until your wound review at 2 weeks post-surgery
- Use an ice pack for 20 minutes, 4 times a day to minimise pain and swelling
- Avoid...
 - Forceful stretching of the elbow
 - Resisted biceps contraction or flexion against gravity (see picture)



Phase 1 Exercises:

Start these exercises the day after surgery. Do them 3 - 5 times per day. Aim to increase the range of movement as able.

<u>Active Assisted Shoulder Flexion and Abduction</u> - Stand or lie on your back. Keep your elbow bent to 90 degrees.

- a) Use your good arm to lift the operated arm to the front then slowly lower. Aim to go higher with each repetition.
- b) Lift the operated arm out to the side

Repeat 3 x 10 each



a) Shoulder Flexion



b) Shoulder Abduction



<u>Active Assisted Elbow Extension</u> – Lie on your back. Raise your arm so your elbows point to the roof. **Use your good arm to assist** the operated elbow to straighten and bend again.

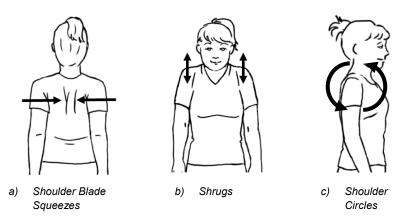
Repeat 3 x 10



Shoulder Blade Exercises

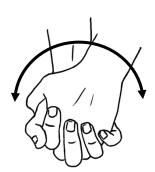
- a) Squeeze your shoulder blades together. Hold for 5 10 seconds then relax.
- b) Shrug your shoulders up towards your ears. Then lower.
- c) Roll your shoulders in circles forward and backward

Repeat x 10 of each



<u>Passive Supination and Pronation</u> – Clasp your hands together with your arm in your sling. Use your good arm to turn the operated palm over and back.

Repeat 3 x 10





Hand Exercises

- a) Finger Range Make a fist then open your hand wide
- b) Wrist Range Move your wrist up/down and in circles Repeat 3 x 10 each

a) Finger range of motion

b) Wrist range of motion



Phase 2: Active Assisted Range of Motion (week 3 - 6)

Goals

- Protect the tendon repair
- Control pain and swelling
- Gradually restore full passive / assisted elbow movement

Sling (6 weeks)

- Wear your sling at all times for 6 weeks
- You may remove it for hygiene (e.g. shower) and exercises

Lifting / Weight Bearing

 No lifting or weight bearing (leaning or pushing) through the arm

Management / Precautions

- Use ice packs to manage swelling and pain as needed
- Start general exercise i.e.: walking and stationary bike (but do not lean on your arm)
- Avoid...
 - Forceful elbow stretching
 - Resisted biceps contraction or flexion against gravity (see picture)

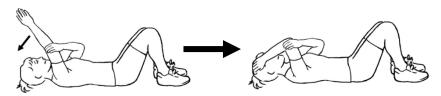


Phase 2 Exercises

Start Phase 2 exercises as guided by your physiotherapist. Perform them 3 - 5 times per day.

<u>Active Elbow Extension</u> - Lie on your back. Raise the operated arm so that your elbow points to the roof. Bend and straighten your elbow.

Repeat 3 x 10



<u>Active Assisted Elbow Flexion and Extension</u> - Support your operated arm with your good arm. Slowly bend and straighten your elbow.

Repeat 3 x 10





<u>Active Supination and Pronation</u> - Keep your arm in the sling. Turn your palm up and down. Repeat 3 x 10





Phase 3: Active Range of Motion & Submaximal Isometric Shoulder Strength (weeks 7 - 12)

Goals

- Protect the tendon repair
- Restore active range of motion of the shoulder and elbow

Sling

- Wean the sling in controlled environments such as your home
- Continue to use it in public or busy places until you feel comfortable

Lifting / Weight Bearing

- Week 7-9: Lift small objects up to 500 grams (i.e. a mobile phone or cup of tea)
- Week 10 12: Lift objects up to 1kg

Management / Precautions

- Start light daily activities within the lifting restrictions
- Work on shoulder range of motion until you have full movement
- Start light elbow flexion (biceps) exercises

Phase 3 Exercises

Start Phase 3 exercises as guided by your physiotherapist. Perform 2 - 3 times daily.

<u>Active Elbow Flexion</u> - Bend and straighten your elbow against gravity. Add a 500 gram weight as tolerated.

Increase the weight to 1kg weight no earlier than week 10.

Repeat 3 x 10

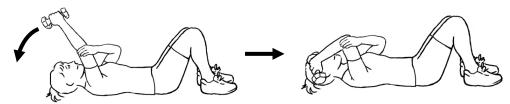




<u>Resisted Elbow Extension</u> - Lie on your back. Raise your arm so that your elbow points to the roof. Hold a small weight (0.5 kg). Bend and straighten your elbow.

Increase the weight to 1kg no earlier than week 10.

Repeat 3 x 10



Resisted Supination and Pronation – Stand with your elbow by your side and bent to 90 degrees. Hold a small weight (0.5 kg) and turn your palm over and back. Increase the weight to 1kg **no earlier than week 10**.

Repeat 3 x 10



Isometric Shoulder Strengthening (Submaximal)

- a) Stand facing a wall. **Gently** push your fist forward in to the wall. Hold for 5 10 seconds.
- b) Stand with your back to the wall. **Gently** push your elbow back in to the wall. Hold for 5 10 seconds.
- c) Stand side on to the wall. **Gently** push your forearm sideways in to the wall. Hold for 5 10 seconds

Repeat x 10 each



a) Shoulder Flexion



b) Shoulder Extension



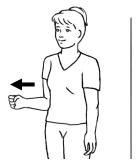
c) Shoulder Abduction



Isometric Shoulder External and Internal Rotation (Submaximal)

- a) Stand side on to a wall. **Gently** push the back of your hand against the wall. Keep your elbow tucked into your side. Hold for 5 10 seconds.
- b) Stand under a door frame. **Gently** push your palm in to the doorframe. Hold for 5 10 seconds.

Repeat x 10 each







b) Internal Rotation



Phase 4: Return to Activity & Light Strength (Month 3 - 6)

Goals

- Return to light daily activities
- · Regain shoulder and elbow strength

Lifting / Weight Bearing

- You can lift up to 2 kg
- Avoid leaning or pushing through the arm

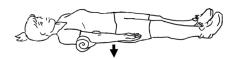
Management / Precautions

- Continue stretches until you have full elbow movement
- Increase weight to 2 kg for elbow strength exercises
- Begin light shoulder strength (i.e.: yellow Theraband)

Phase 4 Exercises

Start Phase 4 exercises as guided by your physiotherapist. Perform them 1 - 2 times daily.

<u>Elbow Extension Stretch</u> - Lie on your back with a towel under your elbow. Straighten your elbow until you feel a stretch in the bicep muscle. Hold for 30 seconds. Repeat 3 times



Resisted Elbow Flexion - Hold a light weight (1kg - 2kg). Slowly bend and straighten your elbow. Repeat 3 x 10





<u>Resisted Elbow Extension</u> - Lie on your back. Hold a small weight (1kg - 2kg) above your head. Bend and straighten your elbow.

Repeat 3 x 10



Resisted Supination and Pronation - Keep your elbow by your side and bent to 90 degrees. Hold a small weight (1kg – 2kg). Turn your palm over and back.

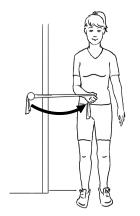
Repeat 3 x 10



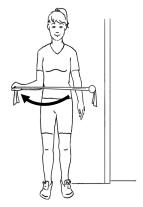
Resisted Shoulder Internal and External Rotation with a Light Exercise Band - Tie a yellow Theraband to a door handle.

- a) Stand side on to the door with your elbow bent to 90 degrees. Rotate your shoulder to pull the band towards your tummy. Then relax.
- b) Turn to face the opposite way. Rotate your shoulder to pull the exercise band out to the side. Then relax.

Repeat 3 x 10 each



a) Internal Rotation



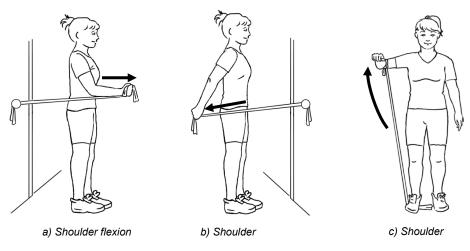
b) External Rotation



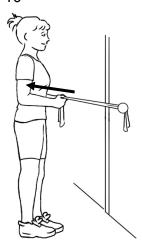
Resisted Shoulder Exercises with Light Exercise Band - Tie a yellow Theraband to a door handle

- a) Stand with your back to the door. Push the band forward.
- b) Stand facing the door. Pull the band backward past your body. Keep your elbow straight.
- c) Stand on one end of a Theraband. Wrap the other end around your elbow. Keep your elbow bent and lift your arm to the side.

Repeat 3 x 10 each



Resisted Shoulder Blade Squeeze with Light Exercise Band - Stand facing the door. Hold the Theraband in both hands. Squeeze your shoulder blades together and pull back on the band. Repeat 3 x 10





Phase 5: Advanced Strength & Return to Sport (6 months onwards)

Goals

- Aim for equal strength in both arms
- Begin sport-specific training and drills
- Return to sport at 6 8 months

Lifting / Weight Bearing

- Gradually increase the load on the biceps. **No restrictions**
- Weight bear as tolerated (push through your operated arm)

Management

- Begin weight-bearing exercises e.g. push ups
- Gradually progress bicep and shoulder strength
- Start sport specific drills as guided by your physiotherapist

Phase 5 Exercises

Start Phase 5 exercises as guided by your physiotherapist. Perform them once daily.

Resisted Elbow Flexion (Bicep Curl) - Increase weight as guided by your physiotherapist.

Repeat 3 x 10



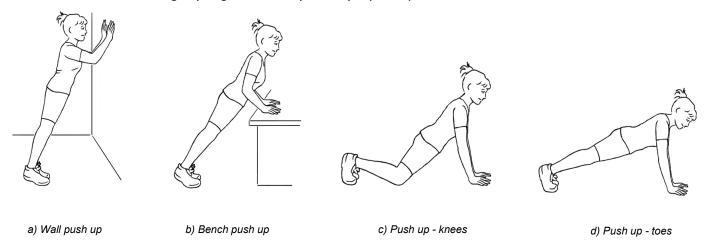
<u>Shoulder Press</u> - Hold a weight at shoulder height. Push up to the roof, then lower. Repeat 3 x 10





<u>Push-up</u> - Stand with your palms on the wall. Lean in to the wall slowly then push out. Repeat 3×10

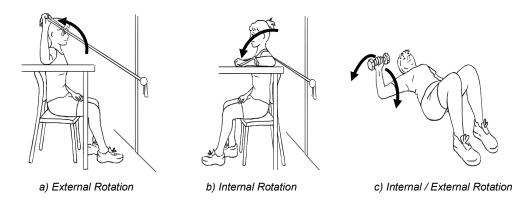
To increase the challenge: progress from push up a) \rightarrow d) as able



<u>External and Internal Rotation with Exercise Band or Weight</u> - Tie an exercise band at shoulder height

- a) Sit with your elbow resting on a table and bent to 90 degrees. Start with your palm on the table. Rotate your shoulder to pull back on the band.
- b) Turn to face the other way. Start with your hand up in the air. Rotate your shoulder to pull the band down to the table.
- c) Lie on your back with your arm out to the side. Hold a small weight (1 2kg). Rotate your shoulder forward and back with control.

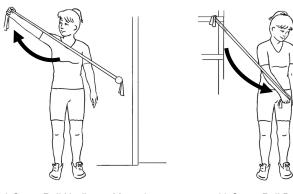
Repeat 3 x 10 of each





Cross Body Pull with Exercise Band

- a) Tie an exercise band to a door handle. Pull diagonally up and out to the side.
- b) Tie exercise band at head height. Pull diagonally down and across your body. Repeat 3 x 10 each



a) Cross Pull Up (Lawn Mower)

b) Cross Pull Down



When can I...?

- Stop wearing the sling?
 - After 6 weeks (Phase 3)
- Sleep without the sling?
 - After 6 weeks (Phase 3)
- Return to driving?
 - When you stop wearing the sling and have adequate range and strength to turn the steering wheel and change gears. As a guide...
 - Automatic car: after 6 weeks
 - Manual car or no power steering: after 8 weeks, to allow adequate strength for gear changes or turning the wheel

Return to work?

- Sedentary employment (e.g. desk job): when comfortable. However your duties may be limited in the first 6 weeks while wearing the sling
- Work that involves light use of the arm (e.g. retail): after 6 weeks you must adhere to lifting restrictions. 0.5kg week 7 - 9, 1kg week 10 - 12, and 2kg month 3 - 6
- Manual labour (e.g. tradesman): Around 6 months. Speak to your surgeon and employer about light duties

Return to sports?

After 6 months - as guided by your physiotherapist and surgeon

Contact

Department of Physiotherapy Allied Health

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The information contained in this brochure is for educational purposes only and is not intended as a substitute for consultation with a doctor or health care professional.